



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,883	10/29/2001	Phillip A. Danner	120751	1812

23465 7590 11/22/2006

JOHN S. BEULICK
C/O ARMSTRONG TEASDALE, LLP
ONE METROPOLITAN SQUARE
SUITE 2600
ST LOUIS, MO 63102-2740

EXAMINER

JONES, PRENELL P

ART UNIT	PAPER NUMBER
----------	--------------

2616

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,883

Applicant(s)

DANNER ET AL.

Examiner

Prenell P. Jones

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,7,12 and 14 is/are rejected.
- 7) ☒ Claim(s) 5,6,8-10,13,15,16 and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Response to Arguments

1. Applicant's arguments with respect to claims 1-16 and 18-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 4, 7, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirschmann (Non-Patent Literature).

Regarding claims 1, 4, 7 and 12, Hirschmann disclose an industrial Ethernet switch, whereby the architecture includes multiple ports, wherein the operating temperature is 0 degrees celcius to 60 degrees celcius, and operating in a non-condensing humidity range of 10% to 95%, and supports services such as VLAN (802.1Q), ROM, SNMP and Spanning tree. Although Hirshmann is silent on the Ethernet switch transferring data between a plurality of devices. It is inherent or the function of the switch to transfer data between networks (plurality devices). Hirschmann further discloses supporting fiber (hyper-ring)/wired speed (pages 1-4).

Regarding claim 3 and 14, as indicated above, Hirschmann disclose an industrial Ethernet switch, whereby the architecture includes multiple ports, wherein the operating

Art Unit: 2616

temperature is 0 degrees celcius to 60 degrees celcius, and operating in a non-condensing humidity range of 10% to 95%, and supports services such as VLAN (802.1Q), ROM, SNMP and Spanning tree. Although Hirshmann is silent on the Ethernet switch transferring data between a plurality of devices. It is inherent or the function of the switch to transfer data between networks (plurality devices). Hirschmann further discloses supporting fiber (hyper-ring)/wired speed. Hirschmann further discloses an that the Ethernet switch operate in conjunction with a plurality of ports accommodate speeds of at least a gigabit (page 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirschmann (Non-Patent Literature) in view of 3COM SuperStack II Switch 9300 (Non-Patent Literature).

Regarding claim 2, as indicated above, Hirschmann disclose an industrial Ethernet switch, whereby the architecture includes multiple ports, wherein the operating temperature is 0 degrees celcius to 60 degrees celcius, and operating in a non-condensing humidity range of 10% to 95%, and supports services such as VLAN (802.1Q), ROM, SNMP and Spanning tree. Although Hirshmann is silent on the Ethernet switch transferring data between a plurality of devices. It is inherent or the function of the switch to transfer data between networks (plurality devices). Hirschmann further discloses supporting fiber (hyper-ring)/wired speed. Hirschmann further discloses an that the Ethernet switch operate in conjunction with a plurality of ports accommodate speeds of at least a gigabit (page 1).

However, Hirschmann is silent on stackable Ethernet switches. In the architecture of an Ethernet switch, 3COM SuperStack II Switch 9300 (Gigabit Ethernet switch) discloses a switch system that provides support for stackable switches (Chapter 2, page 20). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement stackable switches as taught by 3COM SuperStack II Switch 9300 with the teachings of Hirschmann for the purpose of managing utilization of operational area.

Allowable Subject Matter

1. Claim 11 is allowed over prior art.
7. Claims 5, 6, 8-10, 13, 15, 16 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:
Although the cited prior art discloses a networking system that implements inter-networking and

Art Unit: 2616

whose architecture includes a switching network wherein the Ethernet switch has a plurality of ports and coupled to a plurality of hubs or concentrators which are coupled to end-stations, Ethernet switch accommodates high-end VLAN applications and switch includes a plurality of plug-in modules, utilization of flexible industrial and educational computer system that includes desktop environment, WLANs are utilized, WLANs devices such as, Ethernet utilize portions of the radio spectrum, utilization of IRWLAN, accommodating Ethernet ports or radio ports and virtual private networks are proprietary, use of virtual networks for providing adequate security for users, Ethernet devices, WLAN/Ethernet technical details reveal temperature range of 0 to 60 °C, and Ethernet switch that supports high-end features, such as VLAN protocol, RMON, QoS, SNMP and Spanning tree and a storage environment whereby the humidity is 10% to 95% non-condensing and switch operating at one gigabit they fail to teach or suggest with respect to claims 5, 6, 8, 11, 15, 16 and 18, extended vibration of at least 2g and shock vibration of at least 4 g, with regard to claim 13, a second switch operationally coupled to a first switch, wherein first switch and second switch are configured to cooperatively operate as one switch.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is 571-272-3180. The examiner can normally be reached on 9:00-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones

November 17, 2006


CHI PHAM
SUPERVISORY PATENT EXAMINER
11/20/06